

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/524,407	02/11/2005	Rudy Willem Jozef Pollen	NL 020782	4837	
24737 75	590 05/12/2006	EXAMINER			
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001			NGUYEN,	NGUYEN, LINH THI	
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER	
			2627		
		DATE MAILED: 05/12/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/524,407	POLLEN, RUDY	WILLEM JOZEF		
		Examiner	Art Unit			
		Linh T. Nguyen	2627			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on 11 I	February 2005.				
2a) <u></u> □	This action is FINAL. 2b)⊠ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims					
 4) Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-9 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 						
Application Papers						
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 11 February 2005 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
2) Notice 3) Information	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal 6) Other:	oate	ГО-152)		

Art Unit: 2627

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruguchi et al (US Publication Number 20030016597) in view of Isomura (US patent number 5038240).

In regards to claims 1 and 8 Haruguchi et al discloses an optical disk drive and method, comprising: a housing; a drive motor and a drive shaft mounted within the housing and adapted to engage the disk for rotating it (Fig. 1), an optical pick-up unit (Fig. 1, element 3), including a fixed part comprising at least a light source (Fig. 2, element 13), and a movable part (Fig. 2, element 12; actuator) with sliding mounted possibility on a guide (Fig. 2, elements 8 and 9) and comprising at least a mirror (Fig. 2, element 22), a focusing lens, and lens-moving elements (Fig. 2, element 12), said movable part being adapted to move a focused beam along the disk (Fig. 3), a PCB having a signal connection to the lens-moving elements on the movable part of the pick-up unit through flexible wires (Paragraph [0064]),

Haruguchi et al does not but Isomura discloses a disk drive characterized in that only one PCB is provided which serves as a mounting base for the fixed part of the optical pick-up unit, the guide, and the drive motor (Fig. 8). At the time of the invention it would

Art Unit: 2627

have been obvious to person of ordinary skill in the art to combine the optical disk drive of Haruguchi et al to have a PCB as a base for the optical pick-up and drive motor as suggested by Isomura. The motivation for doing so would have been to improve mounting precision of each part and decrease manufacturing cost (Column 2, lines 41-42)

In regard to claim 2, Haruguchi et al does not but Isomura discloses the optical disk drive, wherein the PCB accommodates electronic components which are mounted to the PCB on a side thereof facing an adjacent housing wall (Fig. 8; electronic components consist of circuit pattern, parts of motor controller, and parts of read/write circuit). The motivation is the same as above.

In regards to claim 3, Haruguchi et al does not but Isomura discloses the disk drive, wherein the PCB is mounted to the housing through heat-conducting mounting means, such as a heat-conducting mat (Column 4, lines 6-9; steel plate are consider as a conductive material). The motivation for doing so would have to improve the distribution of the heat from the housing.

In regards to claim 4, Haruguchi et al discloses the optical disk drive, wherein the flexible wires are contained within a wire flex (suspension wires) which is bendable about one bending axis only, said bending axis being substantially parallel to the shaft of the drive motor (It is obvious that wires are able to bend axis direction or any direction).

In regards to claim 5, Haruguchi et al does not but Isomura discloses the disk drive, wherein the linear guide (Fig. 9, element 48) for the movable part of the optical

Art Unit: 2627

pick-up unit is mounted directly on the PCB (Fig. 3, element 50). The motivation is the same as claim 1 above.

In regards to claim 6, Haruguchi et al does not but Isomura discloses the disk drive as, wherein the housing is made of metal. The motivation is the same as claim 3 above.

In regards to claim 7, Haruguchi et al discloses the optical disk drive as claimed in claim 1, wherein the movable part of the pick-up unit comprises an actuator having driving coils for the focusing lens, said driving coils being connected to the PCB through said flexible wires (Paragraph [0081] and [0087]).

In regards to claim 9, Haruguchi et al does not but Isomura discloses the method as claimed in claim 8, wherein the parts (2, 5, 9) and electrical components are fixed to the PCB in one soldering step (Column 2, lines 56-58; Fig. 8). The motivation is the same as claim 1 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/524,407 Page 5

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN May 2, 2006

SUPERVISORY PATENT EXAMINER